

WebQuest Process and Web Resources

Use GRASPS below to fill in your content area table at the bottom of the page.

Goal:

- The Kandinsky Art Foundation (KAF) has just approved a \$50 million grant to support the building of a green Visual and Performing Arts Center. Invitations have been sent to prospective architectural design firms each of which will be paired with today's most notable artists. These design teams will work together to develop the ultimate building proposal.

Role:

- Each member of the design team will be responsible for working on and participating in all aspects of the building design proposal; however, each member will chair a specific division. Below are the individual divisions including partial job descriptions:
 - Architectural Structure & Design Engineer:
 - The Architectural Structure & Design Engineer will oversee the planning, designing and construction of the building. They will create and execute design solutions in terms of usability, user ergonomics, engineering, and marketing.
 - Ecodesign Executive:
 - The Ecodesign Executive will take into consideration the environmental impact of the life cycle of the building. They will work with the other divisions' chairperson to analyze the consumptions of resources such as energy, materials, water, and/or land area; emissions to air, water, and the ground in relation to the environment and human health; and any indirect environmental aspects.
 - Performing Arts Director:
 - The Performance Arts Director will be in charge of finding and showcasing artists of various talents. Also, they will be responsible for discovering and featuring the technology that will be in use at the Kandinsky Performance Art Center.
 - Visual Arts Historian Specialist:
 - The Visual Arts Specialist will need to gather many pieces of art from various genres and decide how they will be displayed with in the Visual Arts Center. The Visual Arts Historian Specialist will need to work with their design team (AS&DE) to create a layout for these pieces of art.

Audience:

- Design teams will present their building to the Kandinsky Art Foundation Board of Directors. Teams will justify their proposal as the Board of Directors reviews and evaluates each submission based on the given criteria.

Situation:

- In the race for the best proposal, design teams will harness their knowledge and skills in the interconnected areas of art, mathematics, science, English, and history. The challenge of meeting the criteria given by the Kandinsky Art Foundation will not be an easy task; however, armed with knowledge, creativity, and fresh ideas, you are prepared.

Product/Performance:

- Design teams will create a Calemeo booklet illustrating the building's Structural Design, Eco-Effectiveness, Visual Arts Center, Performing Arts Center.

Standards:

- Rubric encompassing each content area.
- Students will meet the Maine Learning Results of each content area.

Presentation:

- Design teams will submit a building design proposal to compete for a \$50 million grant awarded by the Kandinsky Art Foundation in support of a new, state-of-the-art, green, Visual and Performing Arts Center.

Product:

- **Design teams will create a wix page magazine booklet illustrating the building's Structural Design, Eco-Effectiveness, Visual Arts Center, Performing Arts Center.**

Science Process

Web Resources (URL)

Ecodesign Executive

You will be asked to research the following topics in order to figure out different ways to maintain and operate a municipal building that is "eco-friendly." Once you have finished gathering information and made your decision, you must provide a detailed description of which systems you will be suggesting be used, and why these specific mechanisms will help generate a green building of the 21st century.

1. Research the different ways a building can be heated. Once

you have generated a list of heating techniques, choose the one

which you feel will create the most "eco-friendly" heating system

for the new museum.

Your research on heating systems must include but is not limited to:

-Type of fuel which will be used to run heating system.

-Where is this type of fuel found?

-What process must this fuel go through before it is ready to be used in heating systems?

-What is the rated BTU of this form of heating unit?

-What chemicals are emitted from the use of this heating system?

-Are there any other waste forms produced from this heating unit other than gases in the form of smoke? Is so, what are they?

-Estimate the following:

-How much will this heating system cost originally, and how much

will it cost to run/maintain this type of heating unit?

-How much fuel will you burn during one year?

-Can you brain-storm another way to heat this building that would be more "eco-friendly"? Is so, discuss what this system might be, and why would it be better for the natural environment?

Resources:

http://www.energysavers.gov/your_home/space_heating_cooling/index.cfm/mytopic=12480

<http://www.popularmechanics.com/home/improvement/energy-efficient/1274631>

<http://www.toolbase.org/Technology-Inventory/HV>

[AC/geothermal-heat-pumps](#)

http://www.energysavers.gov/your_home/space_heating_cooling/index.cfm/mytopic=12640

http://www.daviddarling.info/encyclopedia/H/AE_heating_fuel_and_system_type_selection.html

http://www.energysavers.gov/your_home/space_heating_cooling/index.cfm/mytopic=12330

http://www.fuelcellmarkets.com/fuel_cell_markets/fuel_production_and_processing/4,1,1,2099.html

http://en.wikipedia.org/wiki/Natural_gas_processing

<http://bbq.about.com/od/gasgrills/g/gbtu.htm>

<http://hearth.com/calc/btucalc.html>

http://en.wikipedia.org/wiki/British_thermal_unit

<http://www.cleanairtrust.org/Home-Heating.html>

http://www.epa.gov/climatechange/emissions/ind_home.html

http://en.wikipedia.org/wiki/Wood_fuel

2. Research how and where electricity can be created. After researching

electricity, please discuss the way/s you would like to see this new museum

provided with power.

Your research on electricity must include but is not limited to:

- What is electricity?
- How can electricity be created?
- How is electricity stored? OR can it be?
- Is electricity reusable?
- How is electricity measured?
- Is there a waste form created from the use of

electricity that effects
the environment? If so, what is it?

-Estimate the following:

*-How much will it cost to provide this museum with
power for one year?*

*-How much will it cost to run power throughout the
building (the original
instillation of electricity)?*

-Can you brain-storm another way to provide this
building with a source of
power that would be more "eco-friendly"? Is so,
discuss what this system
might be, and why would it be better for the natural
environment?

Resources:

<http://www.code-electrical.com/historyofelectricity.html>

<http://inventors.about.com/cs/inventorsalphabet/a/electricity.htm>

<http://science.howstuffworks.com/electricity.htm>

<http://en.wikipedia.org/wiki/Electricity>

<http://42explore.com/electric.htm>

<http://www.eia.doe.gov/>

<http://michaelbluejay.com/electricity/cost.html>

<http://www.csgnetwork.com/elecenergycals.html>

http://www.electrical-installation.org/wiki/Main_Page

<http://www.doityourself.com/stry/h2installelecwiring>

3. Research the various forms of how waste water

can be treated. Pick one

**method of waste water treatment and discuss
how it will be the most**

**"eco-friendly" method of dealing with waste
water for the museum.**

**Your research on waste water treatment must
include but is not
limited to:**

- Waste water treatment processes.
- What is considered waste water?
- What are the chemicals and bacteria that may be present in waste water?
- What are the possible problems and risks of not effectively treating waste water?

-Estimate the following:

-How much waste water will this museum produce each year?

-How much will it cost to effectively maintain the waste water produced from the use of this facility?

-Can you brain-storm another way to effectively treat the waste water produced from the museum so that it would be more "eco-friendly"? If so, discuss what this process might be, and why would it be better for the natural environment?

Resources:

<http://ga.water.usgs.gov/edu/wuww.html>

http://en.wikipedia.org/wiki/Sewage_treatment

http://images.google.com/images?q=wastewater+treatment&oe=utf-8&rls=org.mozilla:en-US:official&client=firefox-a&um=1&ie=UTF-8&ei=wIPES9e9OYOB8gb195jiDw&sa=X&oi=image_result_group&ct=title&resnum=11&ved=0CDwQsAQwCg

<http://water.me.vccs.edu/courses/ENV149/methods.htm>

<http://ei.cornell.edu/biodeg/wastewater/>

<http://www.oas.org/OSDE/publications/Unit/oea59e/ch25.htm>

<http://www.colorado.edu/engineering/civil/CVEN4434/resources/costs.html>

<http://ideas.repec.org/a/eee/jeeman/v11y1984i1p28-38.html>

http://ec.europa.eu/environment/waste/studies/eucostwaste_management.htm

http://wasteage.com/mag/waste_calculating_costs_waste/

4. Present your work in the wix page magazine:

Pull all pieces of the process portion of this project together and present them to the selection committee in magazine booklet.

Resources:

<http://www.youtube.com/watch?v=UAYJVPm8uC8>

<http://support.wix.com/index.php/Videos>

History Process

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Web Resources (URL)

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History Process:

The Visual Arts Specialist will need to gather many pieces of art from various genres and decide how they will be displayed with in the Visual Arts Center. The Visual Arts Historian Specialist will need to work with their design team (AS&DE) to create a layout for these pieces of art.

1. Collect and record a list of possible submissions of art pieces from local artists (your classmates).
2. Choose how the museum would organize the artwork. Here are a few suggestions:

- Type of artwork: photography, written, digital, musical, ect
- Content: works of art dealing with the same event
- Theme: works commentating on a similar problem/phenomenon

3. Pick 3 pieces of art.

4. Research and find a professional/published art work dealing with the same subject. The stance/position the professional piece takes does not have to be the same as the student's piece, in fact it might be more interesting if they were opposing views of the same subject.

911

a specific example http://www.meledandri.com/theartproject/pages/46ag_project.htm

the main website <http://www.meledandri.com/theartproject/index.htm>

Hurricane Katrina

photography <http://www.katrinadestruction.com/images/v/>

refrigerator art <http://neworleans.about.com/od/artsentertainment/ig/Katrina-Refrigerator-Art/>

street art <http://www.trendhunter.com/trends/hurricane-gustav-hurricane-katrina-street-art-banksy>

Haiti earthquake

example <http://www.canstockphoto.com/haiti-earthquake-3044110.html>

more <http://www.redbubble.com/search/haiti%20earthquake>

actual photos http://www.time.com/time/photogallery/0,29307,1953257_2024769,00.html

political cartoons

one <http://www.politicalcartoons.com/>

two <http://cagle.msnbc.com/PoliticalCartoons/>

5. Write a paragraph detailing why you selected the students' pieces, the professional pieces, a little bit about the artists, and introduce the piece to an audience.

6. Meet and discuss with the Architectural Structure & Design Engineer of the group and map out where you want everything to go.

7. Think about the reason why you have been learning art. What is the purpose of art? Why do we have museums in the first place? Think about why you would want people to visit your museum and what you want them to leave having learned?

8. Write a mission statement for the museum: This link will help

<http://www.fundforartsandculture.org/res/other/museumMissionStatements.ppt>.

9. Put everything together with your teammates into a wix page magazine: <http://www.wix.com/>

English Process:

Performance Art

Performing Arts Director:

- *The Performance Arts Director will be in charge of finding and showcasing artists of various talents. Also, they will be responsible for discovering and featuring the technology that will be in use at the Kandinsky Performance Art Center.*

This process has two pieces. One piece is centered on artists and the other is centered on technology in the Performance Arts Center. Each of these pieces will contribute to an overall understanding of what the Performance Art Center will contribute to the art community and the Kandinsky Art Museum.

Artist

1) You will need to pick three performance artists from various genres (e.g. slam poets, musicians, etc) Use your imagination and don't just limit yourself to mainstream artists or mediums.

- http://en.wikipedia.org/wiki/Category:Slam_poets
- http://en.wikipedia.org/wiki/Lists_of_musicians
- http://en.wikipedia.org/wiki/List_of_stand-up_comedians
- http://en.wikipedia.org/wiki/Category:Stage_actors

2) From these artists you will need to write a short personal and work biography (who are they and what kind of work do they do). This needs to be accompanied by a rationale that explains why you believe that each artist will be an asset to the Kandinsky Art Museum. Consider including an example of their work.

3) Showcase these artists in a wix page magazine.

<http://www.wix.com/>

Technology

1) Research what types of technology are available to the performance art community.

* <http://www.westsidesystems.com/f-vll/vll.html>

- <http://www.dpacnc.com/default.asp?dpac=51&objId=51>
- <http://www.avstumpfl.com/>

2) From your findings pick 2-3 examples of what you would like to have for the Performance Art Center.

3) Write a rational discussing the technologies features and how it will benefit the Performance Art Center to have them.

4) Showcase these technologies in a wix page magazine.

<http://www.wix.com>

Math Process:

Quick Checklist:

- o Get ideas for the museum design.
- o Draw and label the basic layout of the museum, including dimensions.

- o Have the layout approved.
- o Construct the museum floor plan on Google SketchUp.
- o Take screen shots of the floor plans to use in a brochure.
- o Create a brochure for your museum, using Calameo.

Museum Planning: Google SketchUp

Architectural Structure & Design Engineer:

The Architectural Structure & Design Engineer will oversee the planning, designing and construction of the building. They will create and execute design solutions in terms of usability, user ergonomics, engineering, and marketing.

1. Within your design team, discuss your ideas for the floor plan of your museum.

- Before delving into SketchUp, start with a clear idea of what you want to accomplish in this project by thinking of how you would like your museum to look as the final outcome. It's a good idea to look through architectural magazines and websites for inspiration, and to get a feel for the technical aspects of your dream museum. It's best to start with the big picture and then fill in the details. To gather ideas, see the floor plans of current museums here:
 - o <http://www.brooklynmuseum.org/floor-plan/>
 - o <http://www.metmuseum.org/visit/floorplans/>
 - o <http://www.philamuseum.org/visit/54-5.html>
 - o <http://www.cmoa.org/info/floor.asp>
- The Kandinsky Art Foundation requires following minimum exhibition accommodations:
 - o Green Building Design
 - o Performing Art Center
 - o Visual Art Display
 - That is, there must be a room or section of the museum depicting each of the previous accommodations. E.g. – The “Green Room” displays the layout and construction of the museum to provide the viewer with a rationale for why the museum is a green building.

2. Once you and your teammates have determined the basic layout of your museum design, have it approved.

3. Start building your museum using Google SketchUp.

- If you do not have Google SketchUp, please download it here:
 - o http://sketchup.google.com/#utm_campaign=en&utm_source=en-ha-na-us-google&utm_medium=referral

[um=ha&utm_term=sketchup%20download](#)

- If you need help with Google SketchUp:
 - Download the manual here: <http://dl.google.com/sketchup/gsu7/docs/en/SketchUp7Help.pdf>
 - Use the support site here: <http://sketchup.google.com/support/?hl=en>
 - Watch the training videos here:
http://sketchup.google.com/intl/en/training/videos/new_to_gsu.html

4. Once your design team has created the museum floor plans, you will work together to create a wix page magazine publication that will be distributed to the Kandinsky Art Foundation Board of Directors.

- Wix Home Page: <http://www.wix.com>